

Appln No. 09/539,197

Amdt date June 30, 2004

Reply to Office action of April 7, 2004

Amendments to the Specification:

Please replace the paragraph beginning on page 18, line 4 with the following rewritten paragraph:

Figure 6 is a block diagram of another embodiment for a multi-channel, multi-service debugging system 600. Referring to **Figure 6**, system 600 may have a number of processing elements (or constructs) (610) running within a cluster 202. In one embodiment, executing service 610 may run a real time application and debugger 660 may run a control task or an operating system task. A number of executing services 610 may be running within basic functional unit (PE) 670. PE 670 includes save stub 662 and restore stub 664. Save stub 662 is an executable program written to save the minimum state of construct 610. Restore stub 664 restores the minimum state from memory 620. The minimum PE state (MPES) is a minimum amount of executing service 610 state registers which are saved and restored in order to halt service 610 execution and restart it again without altering the functional behavior of service 610. ~~Debug~~ Debugger 660 runs on a processor other than the PE 670. Debugger 660 interacts with save stub 662 and restore stub 664 to read and/or modify service 610 state information and control service 610 execution.